t's been said that more human history has been preserved underwater than in all the museums of the world. That could very well be true. For thousands of years, seagoing ships allowed empires to be built, trade and communication to flourish, and populations to expand. Not surprisingly, many vessels fell victim to weather, war, or other catastrophes, leaving an underwater legacy that now preserves revealing snapshots of human history.

NOAA has become a leader in U.S. maritime archaeology, helping to preserve our national and world heritage in coastal, Great Lakes, and ocean waters through the Office of National Marine Sanctuaries' Maritime Heritage Program, Office of Ocean Exploration, and Marine Protected Areas. NOAA is the steward for 13 National Marine Sanctuaries committed to preserving historical, cultural, and archaeological resources.

Here are two examples of NOAA's work.

## The USS Monitor

The 1975 discovery of the USS Monitor led to the creation of the first National Marine Sanctuary to protect this national treasure. This innovative ironclad ship, with her revolving gun turret weighing 120 tons, battled the Confederate ironclad CSS Virginia for control of Hampton Roads, Va., during the Civil War. Nine months later, Monitor foundered in a storm near Cape Hatteras. N.C. Today, her remains and the surrounding column of water one nautical mile in diameter constitute the Monitor National Marine Sanctuary. The Monitor was also designated as a National Historic Landmark in 1986.

NOAA teamed with the U.S. Navy and The Mariners' Museum — the principal repository for *Monitor* artifacts — to recover and conserve portions of the vessel.

Using the deep-sea submersible *Johnson-Sea-Link II*, archaeologists in 2001 toured the site to document conditions. Not surprisingly, they saw the remains had become home to Moray eels, manta rays, amberjack, octopi, and sponges, to name a few species. Over the next two

years, NOAA and Navy divers worked hard to uncover the *Monitor*'s mysteries and prepared to recover major parts of the ship. In 2001, the steam engine and the engine bed frames were raised. The next year, in a 41-day expedition, the massive gun turret was lifted from the sea bottom — after Navy divers removed thousands of pounds of sediment as NOAA archaeologists watched the work via the divers' helmet cameras. The turret was delivered to The Mariners' Museum in Newport News,

Va., where it will remain in a conservation tank for five to 10 years. Besides the large cannons, personal items were found inside the turret, including a gold ring, its owner unknown, along with skeletal remains of a Union sailor.

Artifacts from the *Monitor*, including two 17,000-pound cannons, many condiment bottles, dinnerware, and a brass signal lantern used to signal the ship's distress the night she sank, can be found on display in The Mariners' Museum.

Monitor National Marine Sanctuary – www.monitor.noaa.gov

Monitor Expedition – www.oceanexplorer.noaa.gov/explorations/ 02monitor/monitor.html

## The Hassler

Commissioned into service in 1871, the U.S. Coast & Geodetic Survey vessel *Hassler* spent many years working diligently along the Pacific coast before being transferred to work in the cold waters off Alaska in 1892. Named after the first superintendent of the Coast Survey, Ferdinand Rudolph Hassler, the 150-foot vessel transported naturalist Jean Louis Agassiz as he gathered deep-sea samples in the Straits of Magellan. Hassler's crew for many years conducted hydrographic surveys and other government work as part of the U.S. Coast and Geodetic Survey, NOAA's oldest predecessor agency.





The Hassler was decommissioned in 1898 prior to being purchased by the Pacific and Alaska Transportation Company and renamed Clara Nevada. On the return leg of her first voyage, Clara Nevada was lost just northwest of Eldred Rock near Juneau. No one survived. The cause of the Clara Nevada's demise has never been determined, although people reported seeing a bright orange fireball and the burning ship. It's been speculated that the ship was carrying Klondike gold as well as an illegal shipment of dynamite.

In 2006, NOAA sponsored an expedition with Alaska's Office of History

and Archaeology to collect information on several historic shipwrecks in Southeast Alaska, including the Hassler/Clara Nevada. The dive team, which included archaeologists and marine biologists, dove down to 88 feet in icy waters ranging from 38 to 41 degrees Fahrenheit to examine the wrecks. They took digital photos and video to record the remains of the ships and their condition. Eventually, they hope not only to better understand changes occurring due to natural processes but also to begin piecing together the traumatic final story of the Clara Nevada.

The collaborative project represented one of the first steps toward the development of a management plan for submerged heritage sites off the coast of Alaska — the state with nearly half the nation's coastline. Researchers involved in the project are evaluating the shipwrecks for their eligibility to the National Register of Historic Places.

Hassler Information — www.oar.noaa. gov/spotlite/archive/spot\_hassler. html and www.oceanexplorer.noaa.gov/explorations/06alaska/welcome.html